

In the Claims:

1. A method as in Claim 35, further comprising the step of:
5 calculating said required amount of carbohydrate according to a formula,
said formula comprising:

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$$CHO = \frac{TARGET - STARTING}{X},$$

10 where *CHO* represents said required amount of carbohydrate, *TARGET* represents said target maximum, *STARTING* represents a starting blood glucose concentration, and *X* comprises an index representing said subject's sensitivity to carbohydrate, said index based on said subject's diabetic status and ease with which said status is controlled.

- AI2 15 3. The method of Claim 35, wherein said carbohydrate includes any of:
conventional liquid and solid food;
conventional solid food;
conventional liquid food.

- 20 4. The method of Claim 1, wherein *X* comprises an exemplary value.

5. The method of Claim 4, wherein *X* is from a range of approximately 1 to 3, wherein 1 represents low carbohydrate sensitivity and wherein 3 represents high carbohydrate sensitivity.

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8. The method of Claim 1, further comprising the step of:
individualizing *X* to said subject based on an actual elevation of blood
glucose concentration resulting from ingesting said calculated amount of
carbohydrate according to:

$$X_i = \frac{OBSERVED - STARTING}{CHO},$$

where observed represents an actual blood glucose value achieved following ingestion of said calculated amount of carbohydrate, wherein X_i represents an individualized value of X .

9. The method of Claim 8, further comprising the step of:
calculating a second required amount of carbohydrate using X_i , wherein said second amount comprises amount required by said subject to achieve elevation of said subject's blood glucose concentration to said target maximum.

10. The method of Claim 9, further comprising the step of:
ingesting said second required amount of carbohydrate by said subject.

11. The method of Claim 9, further comprising the step of:
achieving and maintaining an optimal glycemic profile based on said formula and X_i .

12. The method of Claim 10, further comprising the step of:
generating an individualized calibration model for said subject for use in non-invasive methods of blood glucose determination employing spectroscopic instrumentation based on idealized ant-correlated glycemic profiles produced using said formula.

14. A method of dietary management of a subject's glycemic profile, wherein an optimal glycemic profile is achieved and maintained, said method comprising the steps of:

calculating an amount of carbohydrate required to induce an elevation in said subject's blood glucose concentration to a target maximum according to a formula, said formula comprising:

$$CHO = \frac{TARGET - STARTING}{X},$$

where *CHO* represents said required amount of carbohydrate, *TARGET* represents said target maximum, *STARTING* represents a starting blood glucose concentration, and *X* comprises a generalized index representing said subject's sensitivity to carbohydrate, said index based on said subject's diabetic status and ease with which said status is controlled;

ingesting said required amount of carbohydrate by said subject;

measuring actual elevation in blood glucose concentration caused by

10 ingesting said required amount of carbohydrate;

generating a value of *X* individualized to said subject, *X_i*; and

achieving and maintaining an optimal glycemic profile based on said formula and *X_i*.

15 16. The method of Claim 13, wherein said carbohydrate includes any of:
conventional liquid food;
conventional liquid and solid food;
conventional liquid and solid food combined.

20 17. The method of Claim 14, wherein *X* is from a range of approximately 1 to 3, wherein 1 represents low carbohydrate sensitivity and wherein 3 represents high carbohydrate sensitivity.

25 20. The method of Claim 14, wherein said generating step comprises:
individualizing *X* to said subject based on an actual elevation of blood glucose concentration resulting from ingesting said calculated amount of carbohydrate according to:

$$X_i = \frac{OBSERVED - STARTING}{CHO},$$

wherein *OBSERVED* represents an actual blood glucose concentration achieved when said subject ingests said calculated amount of carbohydrate and X_i represents said individualized value of X .

21. The method of Claim 20, wherein achieving and maintaining an optimal glycemic profile comprises the steps of:

calculating a second required amount of carbohydrate to ingest to achieve and maintain said optimal glucose profile based on said formula and X_{ii} and

10 ingesting said second required amount in divided portions over a predetermined time span.

24. A method of predicting a required amount of carbohydrate to ingest to produce an elevation in blood glucose concentration in a subject from a starting value to a target maximum, said method comprising the steps of:

providing said target and starting values; and

calculating said required amount of carbohydrate according to a formula, said formula comprising:

$$CHO = \frac{TARGET - STARTING}{X},$$

20 where CHO represents said required amount of carbohydrate, $TARGET$ represents said target maximum, $STARTING$ represents a starting blood glucose concentration, and X comprises a generalized index representing said subject's sensitivity to carbohydrate, said index based on said subject's diabetic status and ease with which said status is controlled.

28. The method of Claim 24, wherein X is from a range of approximately 1 to 3, wherein 1 represents low carbohydrate sensitivity and wherein 3 represents high carbohydrate sensitivity.

31. The method of Claim 24, further comprising the step of:

individualizing X to said subject based on an actual elevation of blood glucose concentration resulting from ingesting said calculated amount of carbohydrate according to:

$$X_i = \frac{OBSERVED - STARTING}{CHO},$$

where *OBSERVED* represents an actual blood glucose concentration achieved following ingestion of said required amount of carbohydrate, and X_i represents said individualized value of X .

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32. The method of Claim 24, further comprising the step of:
achieving and maintaining an optimal glycemic profile.

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33. The method of Claim 24, further comprising the step of producing idealized, anti-correlated glycemic profiles in a subject so that individualized calibration models may be generated for use in non-invasive methods of blood glucose determination employing spectroscopic instrumentation.

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Please insert new Claim 35 as follows:

Please charge additional claim fees to Deposit Account No. 07-1445.

35. A method of generating a glycemic profile in a subject having a predetermined shape, comprising the steps of:

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driving said subject's blood glucose concentration to a target maximum through oral ingestion by said subject of a calculated amount of carbohydrate required to achieve said target maximum;

monitoring said individual's blood glucose concentration at predetermined time intervals; and

driving said subject's blood glucose to a target minimum through administration of a hypoglycemic agent;

wherein rate of change of said glucose concentration substantially corresponds to a target rate; and

wherein a resulting glycemic profile is minimally correlated to factors other than subject's blood glucose concentration.

Please cancel Claims 2, 6, 7, 13, 15, 18, 19 25, 27, 29, 30 and 34 from the
10 Application.